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DATE MAILED: 07/13/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/747,647	12/22/2000	Aman Gupta	GEMS8081.055	4528
27061	7590 07/13/2005		EXAMINER	
ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (GEMS)			MCCLELLAN, JAMES S	
14135 NORTH CEDARBURG ROAD MEQUON, WI 53097		ART UNIT	PAPER NUMBER	
			3627	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/747,647	GUPTA ET AL.				
Office Action Summary	Examiner	Art Unit				
	James S. McClellan	3627				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be till y within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONI	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 26 April 2005.						
2a)⊠ This action is <b>FINAL</b> . 2b)□ This	This action is <b>FINAL</b> . 2b) This action is non-final.					
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-21</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-21</u> is/are rejected.	S)⊠ Claim(s) <u>1-21</u> is/are rejected.					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/c	or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	kaminer. Note the attached Office	e Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
, 2. Certified copies of the priority documents have been received in Application No						
<ol> <li>Copies of the certified copies of the prior</li> </ol>	•	ed in this National Stage				
application from the International Burea						
* See the attached detailed Office action for a list	of the certified copies not receive	ea.				
Attachment(s)						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal I	Patent Application (PTO-152)				
Paper No(s)/Mail Date	6)					

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#### **DETAILED ACTION**

### Amendment

1. Applicant's submittal of an amendment was entered on April 26, 2005, wherein: claims 1-21 are pending and claim 1 has been amended.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences) and therefore are found to be non-statutory subject matter. For a process, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claim 1 fails to include a positive limitation in the body of the claim that places the invention clearly within the technological arts. As currently presented, claim 1

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example, the database in claim 1 is not necessarily an electronic or computer database.

Applicant can overcome this 101 rejection by amending claim 1 to include a limitation that clearly states the steps are conducted using technology.

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1, 4-6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,809,479 (Martin) in view of U.S. Patent No. 6,032,121 (Dietrich).

Regarding claim 1, Martin discloses a method for reporting status of work in progress comprising the steps of: periodically querying a database (14; see Figure 1; see also column 2, lines 48-49) that contains data indicating an order number (inherent), a promise date (see column 3, lines 57-61), a request date (see column 3, lines 27-55, "customer-preferred ship date"), and a shipment date (see column 4, line 2, "customer-expected delivery date"); comparing the promise dates and the request dates (see column 3, line 56 – column 4, line 23). Regarding claim 8, it is noted that Martin notifies a customer when there is a discrepancy between the promise date and the request date (see column 4, lines 3-4).

Martin fails to disclose setting a proactive promise alert if a promise date is later than a request date for a given order and displaying the proactive alerts with the order numbers. If there

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is a discrepancy between the promise date and request date, Martin merely recognizes the discrepancy and reschedules (see column 3, line 56 – column 4, line 23).

Dietrich teaches the use of method of "proactive" planning (as required by claim 1) in real-time (as required by claim 5) to provide advance warnings (see column 2, lines 58-61; see also column 6, lines 25 – column 7, line 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin with the proactive warning (alert) taught by Dietrich, because an early warning system reduces the chance that undesired events will occur.

It is noted that Martin fails to clearly disclose data related to product category of products or services. The Examiner takes Official Notice that it is old and well known to identify product categories for product orders. The Examiner cites Martin et al. (US 6,606,607) as factual evidence that it is old and well known for product order data to include data related to product categories (see column 4, lines 36-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin with data related to product categories as is well known in the art, because providing additional product order data related to product category allows users to better analyze product order data.

6. Claims 2, 3, 7, and 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Dietrich as applied to claim 1 above, and further in view of U.S. Patent No. 6,322,502 (Schoenberg)

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Martin and Dietrich disclose all the limitations as set forth above but fail to explicitly disclose setting a reactive alert if a shipment date exists and the request date is less than a user-defined number of days prior to a current date.

Schoenberg teaches the use of reactive alerts (see column 5, lines 39-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin/Dietrich with reactive alerts as taught by Schoenberg, because the use of reactive alerts are helpful management tools for correcting problems when undesired activities have already occurred.

### Response to Arguments

7. Applicant's arguments filed April 26, 2005 have been fully considered but are not persuasive.

On page 6, second paragraph, Applicant argues that the Examiner's rejection under 35 U.S.C. § 101 is disingenuous because the 35 U.S.C. § 101 rejection was made for the first time in an Office Action that reopens prosecution. The rejection was made at the time of reopening after Applicant's filing of an appeal brief because members of the Appeal Conference noted that the appealed claims appeared to lack technology in the body of the claims as required under 35 U.S.C. § 101.

On page 6, fourth paragraph, Applicant argues that there is no requirement in 35 U.S.C. § 101 that an invention use technology. As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings

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and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See In re Musgrave, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See Diamond v. Diehr, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See State Street Bank & Trust Co. v. Signature Financial Group, Inc. 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See In re Toma, 197 USPQ (BNA) 852 (CCPA 1978). In Toma, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to Gottschalk v. Benson, 409 U.S. 63, 175 USPQ (BNA) 673

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(1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. In re Toma at 857.

In Toma, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under °101, but rather under §§102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of

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an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in Toma. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

As set forth above, Applicant may overcome the 35 U.S.C. § 101 rejection by amending claim 1 to include a limitation that clearly states the steps are conducted using technology. For example, in claim 1, line 3, Applicant can insert "electronic" in front of "database" and the 35 U.S.C. § 101 rejection would be withdrawn.

On page 7, second paragraph (also argued on page 11, second full paragraph), Applicant argues that Martin et al. fails to disclose an alert and there is no need or motivation to generate or display any alert in Martin et al. As set forth above in the rejection, Martin compares promise dates and request dates (see column 3, line 56- column 4, line 23). When there is a discrepancy, the delivery date is rescheduled based on a notification (or alert) sent to the scheduler for rescheduling. Martin merely fails to disclose an alert that is "proactive". Dietrich is relied upon to disclose providing the proactive alert (advance warnings; see Dietrich column 2, lines 58-61 and column 6, line 25-column 7, line 17). Clearly, it is beneficial to provide a proactive alert to allow the supplier time to try to correct the shipping issue so the delivery date does not need to be rescheduled. Dietrich discloses proactive planning that specifically recognizes instances that

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may cause a potential problem (in the current application the problem is a late delivery) and provides advance warning such the problem may be corrected (advance warnings; see Dietrich column 2, lines 58-61 and column 6, line 25-column 7, line 17).

On page 8, first and second full paragraph, Applicant traverses the Examiner's assertion of Official Notice. It is noted that Applicant's traversal is not adequate because MPEP 2144.03 requires Applicant to specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or wellknown in the art. See 37 CFR 1.111(b). See also Chevenard, 139 F.2d at 713, 60 USPQ at 241 ("[I]n the absence of any demand by appellant for the examiner to produce authority for his statement, we will not consider this contention."). A general allegation that the claims define a patentable invention without any reference to the examiner's assertion of official notice would be inadequate. MPEP 2144.03 further states if applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate. As set forth above, the Applicant's traversal is inadequate because Applicant failed to specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. However, in order to expedite prosecution, the Examiner cites Martin et al. (US 6,606,607) as factual evidence that it is old and well known for product order data to include data related to product categories (see column 4, lines 36-40).

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On page 9, final paragraph, Applicant argues that Dietrich fails to teach displaying a promise alert and/or displaying a reactive alert by product/service category and type of alert. Applicant further argues that Dietrich fails to disclose reactive alerts. Applicant is arguing the references individually instead of arguing the full combination of references relied upon under 35 U.S.C. § 103. Schoenberg, not Dietrich is relied upon to disclose reactive alerts (see column 5, lines 39-48).

On page 10, first full paragraph, Applicant argues that there is a lack of motivation to combine Schoenberg with Martin and Dietrich. The Examiner respectfully disagrees. As set forth above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martin/Dietrich with reactive alerts as taught by Schoenberg, because the use of reactive alerts are helpful management tools for correcting problems when undesired activities have already occurred. In this case, Dietrich notifies a scheduler to reschedule. It would have been obvious to alert the scheduler reactively if a proactive alert was not generated in order to correct the problem.

### Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. McClellan whose telephone number is (571) 272-6786. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S McClellan Primary Examiner Art Unit 3627

jsm July 8, 2005